



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R02-OAR-2018-0817, FRL-9990-92-Region 2]

Approval of Source Specific Air Quality Implementation Plans; New Jersey

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a revision to the New Jersey State Implementation Plan (SIP) for the 2008 8-hour ozone National Ambient Air Quality Standard in relation to a Source Specific SIP for Gerdau Ameristeel in Sayreville, New Jersey. On December 5, 2018, the New Jersey Department of Environmental Protection approved an administrative amendment reflecting new ownership and name change to Commercial Metals Company. The control options in the Source Specific SIP that address nitrogen oxide Reasonably Available Control Technology for the natural gas fired billet reheat furnace remain the same under the new ownership. The intended effect of this SIP revision is for the Sayreville facility to continue to operate under their facility specific maximum allowable nitrogen oxide emission rate. The affected source will not increase hourly nitrogen oxide emissions, therefore, the National Ambient Air Quality Standards for ozone is protected.

DATES: Comments must be received on or before **[INSERT DATE 30 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID number EPA-R02-OAR-2018-0817, at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment

received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, such as the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Linda Longo, Air Programs Branch, Environmental Protection Agency, 290 Broadway, 25th Floor, New York, New York 10007-1866, (212) 637-3565, or by email at longo.linda@epa.gov.

SUPPLEMENTARY INFORMATION:

Table of Contents

- I. Background
- II. EPA's Evaluation of New Jersey's Submittal
- III. Proposed Action
- IV. Incorporation by Reference
- V. Statutory and Executive Order Reviews

I. Background

The Environmental Protection Agency (EPA) proposes to approve revisions to the New Jersey State Implementation Plan (SIP) for attainment and maintenance of the 2008 ozone National Ambient Air Quality Standard (NAAQS). Specifically, under New Jersey

Administrative Code, Title 7, Chapter 27, Subchapter 19, “Control and Prohibition of Air Pollution from Oxides of Nitrogen” (N.J.A.C. 7:27-19). The New Jersey Department of Environmental Protection (NJDEP) reviewed and approved the facility specific emission limit (FSEL) nitrogen oxide (NO_x) control plan and the associated Reasonably Available Control Technology (RACT) for the Gerdau Ameristeel facility located in Sayreville, New Jersey (Sayreville Facility). The RACT for this SIP revision is the lowest emission limitation economically feasible for controlling NO_x emissions from the Sayreville Facility’s billet rehear furnace (Sayreville BRF). The Sayreville BRF is used to raise the temperature of steel billets to the required level for hot rolling.

Subchapter N.J.A.C. 7:27-19.13(a)(1), “Alternative and facility specific NO_x emission limits,” allows owners and operators of major sources of NO_x, upon approval of the NJDEP, to obtain FSELs for maximum allowable NO_x emission rates by submitting a NO_x control plan that meets the requirements of N.J.A.C. 7:27-19.13(b). Furthermore, Subchapter N.J.A.C. 7:27-19.13(a)(3) allows facilities that wish to continue to operate under existing NO_x control plans that were approved prior to May 1, 2005 to make the request by submitting an updated proposed NO_x control plan as required in N.J.A.C. 7:27-19.13. The Sayreville Facility wishes to continue to operate under its existing NO_x control plan that was approved by the State on March 15, 2005. A full summary is included in the technical support document (TSD) that is contained in EPA’s docket assigned to this Federal Register notice.

Please note that on December 5, 2018, the NJDEP approved an administrative amendment reflecting new ownership and name change of the Sayreville Facility from Gerdau Ameristeel to Commercial Metals Company. All control options for the Sayreville BRF and CAA permit limits

(as approved by the NJDEP in the March 2005 NO_x control plan) remain the same under the new ownership as were under the former owner Gerdau Ameristeel.

Ozone requirements

In 1997, the EPA revised the health-based NAAQS for 8-hour ozone, setting it at 0.084 parts per million (ppm) averaged over an 8-hour time frame. *See* 62 FR 38856 (July 18, 1997). The EPA revised the 8-hour ozone standard twice since 1997; in March 2008, the EPA revised the standard to 0.075 ppm, and in October 2015 the EPA revised it to 0.070 ppm while retaining the 2008 ozone indicators. *See* 73 FR 16436 (March 27, 2008); 80 FR 65292 (October 26, 2015). After the EPA establishes a new or revised NAAQS, the Clean Air Act (CAA) directs the EPA and the states to take steps to ensure that the new or revised NAAQS are met. One of the first steps, known as the initial area designations, involves identifying areas of the country that are not meeting the new or revised NAAQS, as well as the nearby areas that contain emissions sources that contribute emissions to the areas not meeting the NAAQS.

The entire state of New Jersey has been designated as nonattainment since the adoption of the 1997 8-hour ozone NAAQS and is divided into two nonattainment areas. The two nonattainment areas in New Jersey are Philadelphia-Wilmington-Atlantic City (PA-NJ-MD-DE) and New York-Northern New Jersey-Long Island (NY-NJ-CT). These areas are designated as marginal nonattainment and as moderate nonattainment, respectively, for the newest 0.070 ppm 8-hour ozone NAAQS.¹ As such, New Jersey has developed ozone SIPs to attain the standards and will consider source-specific SIPs as necessary. A source-specific SIP is submitted by a facility to request approval for source-specific emission limitations, and if approved by the state and the EPA, are incorporated into the state's ozone SIP.

¹ Classifications of these areas for the current and previous ozone NAAQS can be found at 40 CFR § 81.331.

RACT requirements

RACT is defined as the lowest emission limit that a source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.² CAA sections 172(c)(1), 182(b)(2) and 182(f) require nonattainment areas that are designated as moderate or above to adopt RACT. The entire state of New Jersey is subject to this requirement because 1) of the nonattainment area designations for the 8-hour ozone standards (40 CFR 81.331), and 2) the state of New Jersey is located within the Ozone Transport Region (OTR), a region in which the CAA requires that state SIPs implement RACT requirements. *See* CAA § 184(b)(1)(B).

On November 25, 1992 the EPA published a supplement to the General Preamble to Title I of the CAA Amendments of 1990 to clarify requirements for NO_x, referred to as the NO_x Supplement. *See* 57 FR 55620. The NO_x Supplement explains that the CAA section 182(f), read in conjunction with section 182(a)(2)(C) and other New Source Review (NSR) related provisions in section 182, require state NSR plans to apply to major stationary sources of NO_x, the same requirements that govern major stationary sources of VOC emissions in ozone nonattainment areas and in other areas located in OTR. Section 182(a)(2)(C) requires States to adopt and submit revised NSR regulations for all ozone nonattainment areas classified as marginal or above.

In November 2005, the EPA published the final rule that discusses the RACT requirements for the 1997 8-hour ozone standard and outlined the SIP requirements and deadlines for various areas designated as moderate nonattainment. *See* 70 FR 71612 (November 29, 2005) (the “Phase 2 Rule”).

² The EPA has not generally prescribed RACT requirements. As defined in “State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas – Supplement (on Control Techniques Guidelines),” RACT for a particular source is determined on a case-by-case basis, considering the technological and economic circumstances of the individual source. *See* 44 FR 53761 September 17, 1979.

On August 1, 2007, the NJDEP finalized RACT revisions to its SIP to address the 8-hour ozone NAAQS and the EPA approved on May 15, 2009. See “RACT for the 8-hour Ozone NAAQS and other Associated SIP Revisions for the Fine Particulate Matter, Regional Haze, and Transport of Air Pollution,” available at <http://www.nj.gov/dep/baqp/sip/8-hrRACT-Final.pdf> and see 74 FR 22837. The NJDEP, taking a more stringent approach, believes that significantly higher costs are warranted and should be considered reasonable with respect to available technology than were discussed in the Phase 2 Rule. Although no dollar amount is suggested, the NJDEP identifies five considerations it plans to apply to sources when determining RACT:

- 1) Past New Jersey costs for retrofitting a given control;
- 2) Average RACT cost (dollars per tons reduced) for a control technology and maximum RACT cost. Once a reasonable number of sources in a source category achieve a lower emission level, other sources should do the same;
- 3) The seriousness of the Region’s ozone air quality exceedance. For nonattainment areas with higher ozone levels, higher costs for controls are reasonable;
- 4) The seriousness of the need to reduce transported air pollution. As an OTR state, higher costs for RACT are justified; and
- 5) The NJDEP plan for addressing economic feasibility in RACT rules.

The NJDEP’s intent is to specify RACT at the lowest emission limit that a reasonable number of similar facilities had already successfully implemented for each source category.

II. The EPA’s Evaluation of New Jersey’s Submittals

Continue to operate under existing NOx control plan

N.J.A.C. 19.13(a)(3) sets forth requirements for facilities that wish to continue to operate under existing NOx control plans that were approved prior to May 1, 2005. The regulation

requires such facilities to submit updated proposed NO_x control plans to NJDEP for review.

Gerdau Ameristeel originally submitted an FSEL NO_x control plan for a BRF (old BRF) at the Sayreville Facility to NJDEP in 1995. In 2004, the facility submitted to NJDEP a proposed FSEL NO_x control plan for a replacement BRF; the new unit was designed with 64 ultra-low NO_x burners. On March 15, 2005, the NJDEP approved the NO_x control plan by authorizing Gerdau Ameristeel to replace the old BRF with the ultra-low NO_x burners.

On October 4, 2016, the Gerdau Ameristeel submitted an updated proposed NO_x control plan to NJDEP requesting to continue to operate the March 15, 2005 NO_x control plan for the Sayreville BRF that has 64 ultra-low NO_x burners and maximum allowable NO_x emission rate of 58.9 tons per year (TPY). On March 20, 2018, the NJDEP submitted to the EPA a proposal to allow the continued use of the control options as outlined in the State approved Gerdau Ameristeel March 15, 2005 NO_x control plan.

The Sayreville BRF has a heat input rating of 172.8 million British Thermal Units per hour (MMBTU/hr) and is permitted under the facility's CAA Title V operating permit (i.e., PI 18052, BOP 150001) for no more than 0.1 MMBTU/hr of NO_x as a major source with FSEL not to exceed 17.3 pounds NO_x per hour and 58.9 tons NO_x per year. The Sayreville Facility is required to conduct annual emission testing to demonstrate compliance with 0.1 lb/MMBtu NO_x emission rate limit. The EPA has determined that the Sayreville BRF identified in the SIP revision are consistent with New Jersey's NO_x RACT regulation and the EPA's guidance.

RACT Analysis

The RACT analysis conducted by Gerdau Ameristeel found eight control technologies suitable for a typical BRF: 1) ultra-low NO_x burners currently in use at the facility, 2) low excess air currently in use at the facility, 3) selective catalytic reduction (SCR), 4) Low NO_x burners, 5)

Flue gas recirculation or reduction of air preheat temperature, 6) Burners out of service, 7) Selective non-catalytic reduction, and 8) Non-selective catalytic reduction. Under the regulations, the first three are technologically feasible, but the latter four were not.

Although the SCR was determined to be technologically feasible, the Sayreville Facility has major concerns with its implementation. First, the facility would need to install an evaporative cooler to control the temperature of the exiting flue gas for this technology to be effective. Second, the SCR catalyst could become damaged by the BRF process. The exhaust gas from the BRF contains concentrations of particulate matter, including metals, which would cause catalyst plugging and masking. The potential for damage cannot be determined with certainty because the Sayreville Facility does not currently have SCR units installed on any BRF that control NO_x to compare potential catalyst poisoning. Moreover, to the best of our knowledge no BRFs in the United States currently employs SCR units.³

Cost analysis was conducted for those control technologies found to be technologically feasible. Since the ultra-low NO_x burners and the low excess air control technologies are currently in use on the facility's BRF, Gerdau Ameristeel conducted the cost effectiveness study only for the SCR. The facility concludes that to purchase and install the SCR will cost \$4,279,380 and the annual operating cost would be \$1,164,379 based on a 20-year useful life of the BRF. The cost effectiveness is based on the annual cost of operating SCR and the amount of NO_x that would be removed. The amount NO_x that would be removed from the SCR is based on 90% (0.9) control efficiency not to exceed the CAA Title V operating permit limit of 58.9 NO_x TPY ($58.9 \text{ TPY} \times 0.9 = 53 \text{ TPY}$). Therefore, the SCR would result in 53 TPY NO_x removed

³ The EPA's RACT/BACT/LEAR Clearinghouse (RBLC), <https://cfpub.epa.gov/rblc/index.cfm?action=Home.Home&lang=en>, demonstrates that 9 U.S. facilities operate a reheat furnace, including billet reheat furnace, and have NO_x emissions. All 9 facilities have pollution prevention add-on control technologies ultra-low or low NO_x burners and none are equipped with SCR.

making the cost effectiveness to be \$21,965 per ton NO_x removed ($\$1,164,379 \div 53 = \$21,965$), which is above the federal RACT guidance. Under EPA guidance, states should consider in their RACT determinations technologies that achieve 30–50 percent reduction within a cost range of \$160–\$1,300 per ton of NO_x removed. *See* 70 FR 71652.

The SCR control technology was found not to be RACT due to technological and economical infeasibility under federal and state RACT criteria.

III. Proposed Action

Gerdau Ameristeel reached agreement with the NJDEP to continue to operate under the approved March 15, 2005 NO_x control plan that allowed the Sayreville BRF to operate using 64 ultra-low NO_x burners. The Sayreville Facility underwent a change in ownership to the Commercial Metals Company without changing its production process or associated equipment. Moreover, the Sayreville Facility met the regulatory requirements under N.J.A.C. 19.13(a)(3) to submit and obtain NJDEP approval for an updated proposed NO_x control plan requesting to continue to operate under their 2005 NO_x control plan approved prior to May 1, 2005. The updated NO_x control plan demonstrates that the only technically feasible control technology currently not in use on the Sayreville BRF is the SCR option and concludes that it is not RACT. Therefore, the EPA proposes to approve the NJDEP SIP revisions for 8-hour ozone for Commercial Metals Company continuing to operate under the 2005 NO_x Control Plan.

IV. Incorporation by Reference

In this document, we are proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, we are proposing to incorporate by reference the provisions described above in Section III. Proposed Action.

The EPA has made, and will continue to make, these documents generally available electronically through <http://www.regulations.gov> and in hard copy at the appropriate EPA office, 290 Broadway, 25th floor, New York, New York, 10007-1866 (see the ADDRESSES section of this preamble for more information).

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule does not have tribal implications as specified by Executive Order 13175, because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law. Thus, Executive Order 13175 does not apply to this action.

List of Subjects 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen Dioxide, Intergovernmental Relations, Ozone, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401 et seq.

Dated: March 9, 2019.

Peter D. Lopez,
Regional Administrator,
Region 2.

[FR Doc. 2019-04781 Filed: 3/20/2019 8:45 am; Publication Date: 3/21/2019]